

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A system for purifying a flow of exhaust gases of diesel or gasoline multicylinder engines containing, on average, an excess of oxygen, and in which a mixing ratio of the engine is periodically adjusted from a lean mixing ratio to a more stoichiometric or rich mixing ratio with a λ value below 1.2, the system ~~consisting of~~ comprising a combination of three operational units, ~~including the combination consisting of:~~

a NO_x adsorption catalyst;

an oxidation catalyst effective to promote oxidation of NO to NO₂ during said lean mixing ratio; and

a particle separator,

wherein, in a flow direction of the exhaust gas, the NO_x adsorption catalyst is arranged before said oxidation catalyst or the NO_x adsorption catalyst is arranged in the same structure with the oxidation catalyst of the three operational units, whereby the system reduces the amounts of hydrocarbons, carbon monoxide, nitrogen oxides and particles present in the exhaust gas.

2. (Canceled).

3. (Previously Presented) The system of claim 1, wherein the order of the operational units, in flow direction of the exhaust gas, is as follows: the NO_x adsorption catalyst, the particle separator, and the oxidation catalyst effective to promote oxidation of at least NO to NO₂.

4. (Previously Presented) The system of claim 1, wherein the order of the operational units, in flow direction of the exhaust gas, is as follows: the NO_x adsorption catalyst, the oxidation catalyst effective to promote oxidation of at least NO to NO₂, and the particle separator.

5. (Previously Presented) The system of claim 1, further comprising an exhaust gas discharge line for each cylinder of the engine, the exhaust gas discharge lines connected to a connecting channel, wherein at least one unit of said combination of operational units are arranged in the exhaust gas discharge line and the connecting channel.

6. (Previously Presented) The system of claim 1, further comprising an exhaust gas discharge line for each cylinder of the engine, each of the exhaust gas discharge lines connected to a connecting channel, wherein NO_x adsorption catalyst is arranged in each exhaust gas discharge line and wherein said oxidation catalyst effective to promote oxidation of at least NO to NO₂ and said particle separator are arranged in the connecting channel.

7. (Previously Presented) The system of claim 1, wherein the system includes two or more partial systems in parallel, each of the partial systems comprising said operational units.

8. (Previously Presented) The system of claim 1, wherein the NO_x adsorption catalyst and/or oxidation catalyst effective to promote oxidation of at least NO to NO₂ are disposed in the same structure with the particle separator.

9. (Previously Presented) The system of claim 1, wherein the oxidation catalyst effective to promote oxidation of at least NO to NO₂ contains platinum and/or palladium catalytic metal(s).

10. (Previously Presented) The system of claim 1, further comprising an exhaust gas discharge line for each cylinder of the engine or one exhaust gas discharge line for two cylinders of the engine, wherein NO_x adsorption catalyst is arranged in each exhaust gas discharge line.

11. (Currently Amended) The system of claim 1, wherein the mixing ratio of the engine in the system is periodically adjusted from a lean mixture to a rich mixture the regeneration of to regenerate sulfates, nitrates, and particles is performed by periodically adjusting the mixing ratio of the engine from a lean mixture to a rich mixture.

12. (Canceled).

13. (Previously Presented) The system of claim 10, wherein said NO_x adsorption catalyst contains catalytic metal platinum and/or rhodium and at least one of the following elements: Ba, Sr, La, Y, Ce, Zr.

Claims 14 to 19 (Canceled).

20. (Canceled).

21. (Previously Presented) The system of claim 13, wherein the NO_x adsorption catalyst further contains at least one of the following elements: Li, Na, K, Rb, Cs, Be, Mg, and Ca.

Claims 22 to 26 (Canceled).

27. (Previously Presented) The system of claim 1, wherein the NO_x adsorption catalyst and the particle separator are disposed at the same location.

28. (Previously Presented) The system of claim 1, wherein the oxidation catalyst effective to promote oxidation of at least NO to NO₂ and the particle separator are disposed at the same location.

29. (Previously Presented) The system of claim 1, wherein the NO_x adsorption catalyst is a first operation unit of the combination of three operational units.

30. (Previously Presented) The system of claim 1, wherein the oxidation catalyst is further effective to promote conversion of HC to H₂O and CO to CO₂.

31. (Previously Presented) The system of claim 1, wherein the combination of three operational units are distributed in a first structure and a second structure, wherein the first structure is an exhaust gas discharge line from one cylinder of the engine and the second structure is a connecting channel downstream of the first structure in a direction of the flow of exhaust gases.

32. (Previously Presented) The system of claim 1, wherein the combination of three operational units are distributed in a first structure and a second structure, wherein the first structure is an exhaust gas discharge line from a plurality of cylinders of the engine and the second structure is a connecting channel downstream of the first structure in a direction of the flow of exhaust gases.

33. (Canceled).